

NuMI Crew and Shifter Checklist

- Beam Permit System on E39 stays up with \$23s in timeline. It is wise to do the “X (eXpert) File Compare” at least once per day to assure the integrity of the BPS.
- Correct number of protons per pulse, TOR101 and TORTGT on E38, LOSS, 1
- Total loss monitors, E38, LOSS, 2, not near trip point, 10 R/S for TLMNS and TLMPT, 30 R/S for TLMCTU, TLMCTD.
- Sealed unit loss monitors on E38, LOSS, 1 & 2 are at noise levels, exception is LMTGTT which must be safely below trip level of 50 R/S. Any off-nominal losses seen in the line are a cause for serious concern.
- Lower hobbit door scarecrow, G:RD1224 safely below trip value of 50,000 mR/hr. Note that this device has a time constant of a few minutes.
- Autotune, if tuning on, should converge in of order 3, or fewer, pulses. Inability to tune has proven to be a sure sign of trouble, indicating unstable beam from the MI.
- Vacuum display on E45 all green except for *’s next to valve Open indications
- Profile monitors M121 and MTGT in beam, others out. Profile widths close to 1mm in both H and V
- Horns ON - E38, HORN, 1, NLSINA, NLSINB, NLSINC, NLSIND read about - 48 KA. If just turned on, they take about 2 minutes to reach this value. Horn turn on is RESET and ON on E38, HORN, 2, NHSA
- Batch 1 BPM trace, page E44, Data Type =Batch1Data, FLASH FRAME nominal at target. As of April 2005 this is -1.8 mm horizontal and +1.0 mm vertical. (Kickers can affect batch 1 differently from the rest)